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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,279	10/25/2000	Hidehiro Matsumoto	00USFP543-HS	2056

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EXAMINER

NGUYEN, DAVID Q

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/695,279

Applicant(s)

MATSUMOTO, HIDEHIRO

Examiner

David Q Nguyen

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☒ Claim(s) 4-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Rasanen (US Patent Number 6445924)

Regarding claim 1, Applicant's admitted prior art shows and describes a mobile wireless communication system comprising: an information server (26; fig. 1) storing information (see fig. 1; and background of the invention, pages 1-5); a portable terminal (20, fig. 1) for carrying out a communication with the information server through a wireless communication line and having a buffer memory (21; fig. 1) which stores the information transmitted from the information server (see fig. 1; background of the invention, page 1-5); a plurality of wireless communication gateway servers (24A and 24B; fig. 1), wherein a first of the plurality of wireless communication gateway servers is determined based on a position of the portable terminal (see background of the invention, pages 4-5), and comprises a buffer memory emulator (25; fig. 1;

Art Unit: 2681

background of the invention, pages 1-5) which stores specification data representing a specification of the buffer memory and transmits information from the information server to the portable terminal based on the specification data (see background of the invention; pages 1-5 and fig. 1); a switching apparatus (22; fig. 1; background of the invention, pages 1-5) for setting a connection between the portable terminal and said first wireless communication gateway server and for setting another connection between the portable terminal and second wireless communication gateway server (see fig. 1; background of the invention, pages 1-5); a wireless telephone server (23) for informing the position of the portable terminal to the plurality of wireless communication gateway servers.

The applicant's admitted prior art does not mention the switching apparatus for setting another connection between the portable terminal and a second wireless communication gateway server when the communication between the portable terminal and the first wireless communication gateway server congests.

However, Rasanen discloses a switching apparatus for setting another connection between the portable terminal and a second wireless communication gateway server when the communication between the portable terminal and the first wireless communication gateway server congests (see col. 3, line 56 to col. 4, line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Rasanen to the applicant's admitted prior art so that the system can reduce a time required for a portable terminal to access information server and reduce connection time.

Art Unit: 2681

Regarding claim 8, Applicant's admitted prior art shows and describes a mobile wireless communication system comprising an information server storing information (see fig. 1; 26; and background of the invention, pages 1-5); a portable terminal (fig. 1; 20) for carrying out a communication with the information server and having a buffer memory (see fig. 1; 21) which stores the information transmitted from the information server (see fig. 1; and background of the invention, pages 1-5); a wireless communication gateway server having a buffer memory emulator (fig. 1; 25) which stores specification data which represents a specification of the buffer memory (see fig. 1; 26; and background of the invention, pages 1-5); the wireless communication gateway server for transferring the information from the information server to the portable terminal based on the specification data (see fig. 1; 26; and background of the invention, pages 1-5); a switching apparatus (see fig. 1; 22); a wireless telephony server for informing the position of the portable terminal to the wireless communication gateway server (see fig. 1; 26; and background of the invention, pages 1-5).

The applicant's admitted prior art does not mention the wireless communication gateway server having a plurality of access points, a specific one of said plurality of access points being determined based on a position of the portable terminal; and the switching apparatus for setting one connection between the portable terminal and a first of said plurality of access points and for setting another connection between the portable terminal and a second of said plurality of access points when the first access point congests.

However, Rasanen discloses a wireless communication gateway server having a plurality of access points (see fig. 1), a specific one of said plurality of access points being determined based on a position of the portable terminal (see col. 3, line 55 to col. 4, line 38); and the

Art Unit: 2681

switching apparatus for setting one connection between the portable terminal and a first of said plurality of access points and for setting another connection between the portable terminal and a second of said plurality of access points when the first access point congests (see col. 3, line 55 to col. 4, line 38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Rasanen to the applicant's admitted prior art so that the system can reduce a time required for a portable terminal to access information server and reduce connection time.

Regarding claims 2 and 9, the combination also discloses wherein the first wireless communication gateway server requests the switching apparatus to change a connection from the one connection to said another connection based on informed position (see col. 3, line 56 to col. 4, line 38 of Rasanen)

Regarding claim 3, the combination also discloses wherein the first wireless communication gateway server decides which of said plurality of wireless communication gateway servers comprises said second wireless communication gateway server (see col. 3, line 56 to col. 4, line 38).

3. Claims 5-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Rasanen (US Patent Number 6445924) and further in view of Chang et al (US Patent number 6487406).

Regarding claims 5 and 11, the combination does not disclose a network connected to the first wireless communication gateway server, the second wireless communication gateway

Art Unit: 2681

server, the switching apparatus and the wireless telephone server, wherein the first wireless communication gateway server, the second wireless communication gateway server, the switching apparatus and the wireless telephone server are capable of communicating through the network. However, Chang et al discloses a network connected to the first wireless communication gateway server, the second wireless communication gateway server, the switching apparatus and the wireless telephone server, wherein the first wireless communication gateway server, the second wireless communication gateway server, the switching apparatus and the wireless telephone server are capable of communicating through the network (see fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Chang et al to the combination so that system can switch from a wireless communication gateway server to another one without losing communication and information.

Regarding claims 6 and 12, the combination does not mention wherein communication between said first wireless communication gateway server, said second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the internet. However, Chang et al shows a first wireless communication gateway server, a second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the internet (see fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Gentry to the combination so that user can access internet via mobile wireless network.

Art Unit: 2681

4. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Rasanen (US Patent Number 6445924) and further in view of Valentine et al. (US Patent Number 6449478).

Regarding claims 7 and 13, the combination does not mention a satellite network connected to the first wireless communication gateway server, the second communication wireless communication gateway server, the switching apparatus and the wireless telephone server; wherein communication between said first wireless communication gateway server, said second wireless communication gateway server, the switching apparatus and the wireless telephone server is through a satellite network. However, Valentine et al shows a satellite network connected to the first wireless communication gateway server, the second communication wireless communication gateway server, the switching apparatus and the wireless telephone server; a first wireless communication gateway server, a second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the satellite network (see fig. 1 and 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Valentine to the combination so that satellite network can be used in mobile wireless network.

5. Claims 14-16 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Rasanen (US Patent Number 6445924) and further in view of Manning et al. (US Patent Number 6580699).

Regarding claims 14 and 24, Applicant's admitted prior art shows and describes a method for operating a mobile wireless communication systems comprising storing a specification data

which represents a specification of a buffer memory of a portable terminal in a buffer memory emulator of a first wireless communication gateway server when the portable terminal is connected to said first wireless communication gateway server (see background of the invention, pages 4-5 and fig. 1). The applicant's admitted prior art does not mention changing from one connection between the portable terminal and said first wireless communication gateway server to another connection between the portable terminal and a second wireless communication gateway server, when said first wireless communication gateway server has a congestion; and transferring the specification data from said first wireless communication gateway server to said second wireless communication gateway server.

However, Rasanen discloses changing from one connection between the portable terminal and said first wireless communication gateway server to another connection between the portable terminal and a second wireless communication gateway server, when said first wireless communication gateway server has a congestion (see col. 3, line 56 to col. 4, line 38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Rasanen to the applicant's admitted prior art so that the system can reduce a time required for a portable terminal to access information server and reduce connection time.

The combination does not mention transferring the specification data from said first wireless communication gateway server to said second wireless communication gateway server. However, Manning et al disclose transferring the specification data from said first wireless communication gateway server to said second wireless communication gateway server (see col. 10, lines 17-26). Therefore, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 2681

time the invention was made to provide the above teaching of Manning et al to the combination so that the system can track roaming of mobile unit that helps for billing.

Regarding claim 15 and 25, the combination also discloses informing a position of the portable terminal from a wireless telephone server (see background of the invention, pages 4-5 and fig. 1); and wherein said wireless communication gateway server sends a request to a switching apparatus to change the connection with the portable terminal to another connection based on apposition data of the portable terminal (see col. 3, line 56 to col. 4, line 38 of Rasanen)

Regarding claim 16, the combination also discloses communication between said first wireless communication gateway server, said second wireless communication gateway server, the switching apparatus and the wireless telephone server is through network (see col. 3, line 56 to col. 4, line 38 of Rasanen)

Regarding claim 26, the combination also discloses a plurality of access points (see fig. 1, of Rasanen), wherein one of the plurality of access points is determined based on an informed position of the portable terminal (see col. 3, line 56 to col. 4, line 38 of Rasanen); and wherein said wireless communication gateway server sends a request to a switching apparatus to change the connection with the portable terminal to another connection based on apposition data of the portable terminal (see col. 3, line 56 to col. 4, line 38 of Rasanen).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Rasanen (US Patent Number 6445924) and further in view of Manning et al. (US Patent Number 6580699) and still further in view of Chang et al (US Patent Number 6487406).

Regarding claim 17, the combination does not mention wherein communication between said first wireless communication gateway server, said second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the internet.

However, Chang et al shows a first wireless communication gateway server, a second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the internet (see fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Gentry to the combination so that user can access internet via mobile wireless network.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Rasanen (US Patent Number 6445924) and further in view of Manning et al. (US Patent Number 6580699) and still further in view of Valentine et al. (US Patent Number 6449478).

Regarding claim 18, the combination does not mention wherein communication between said first wireless communication gateway server, said second wireless communication gateway server, the switching apparatus and the wireless telephone server is through a satellite network.

However, Valentine et al shows a first wireless communication gateway server, a second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the satellite network (see fig. 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Valentine to the combination so that satellite network can be used in mobile wireless network.

Art Unit: 2681

8. Claims 19 and 21 are rejected under 35 U.S.C. 102(e) as being unpatentable over Rasanen (US Patent Number 6445924) in view of Ray et al (US Patent Number 6424638).

Regarding claim 19, Rasanen discloses a method of operating a mobile wireless communication system comprising changing from one connection between a portable terminal and one access point of a wireless communication gateway server to another connection between the portable terminal and another access point of the wireless communication gateway server, when the wireless communication gateway server has a congestion (see col. 3, line 56 to col. 4, line 38). Rasanen is silent to disclose said wireless communication gateway server converts a protocol between the portable terminal and an information server on a network. However, Ray et al discloses said wireless communication gateway server converts a protocol between the portable terminal and an information server on a network (see col. 1, lines 45-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Ray et al to Rasanen so that the system can provide information to user when user is out of the home service provider.

Regarding claim 21, the combination also shows the wireless communication gateway server, the switching apparatus and the wireless telephone server communicate through a network (see col. 3, line 56 to col. 4, line 38 of Rasanen).

9. Claims 20 is rejected under 35 U.S.C. 102(e) as being unpatentable over Rasanen (US Patent Number 6445924) in view of Ray et al (US Patent Number 6424638) and further in view of Applicant's admitted prior art.

Regarding claim 20, the combination also discloses wherein said wireless communication gateway server sends a request to a switching apparatus to change the connection with the portable terminal to another connection based on apposition data of the portable terminal (see col. 3, line 56 to col. 4, line 38 of Rasanen). The combination is not mention informing a position of the portable terminal from a wireless telephone server. However, the applicant's admitted prior art mentions informing a position of the portable terminal from a wireless telephone server (see background of the invention, pages 4-5 and fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of the applicant's admitted prior art to the combination so that the system can provide information to user when user is out of the home service provider.

10. Claim 22 is rejected under 35 U.S.C. 102(e) as being unpatentable over Rasanen (US Patent Number 6445924) in view of Ray et al (US Patent Number 6424638) and still further in view of Chang et al (US Patent Number 6487406).

Regarding claim 22, the combination does not mention wherein communication between said first wireless communication gateway server, said second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the internet. However, Chang et al shows a first wireless communication gateway server, a second wireless communication gateway server, the switching apparatus and the wireless telephone server is through the internet (see fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Gentry to the combination so that user can access internet via mobile wireless network.

Art Unit: 2681

11. Claim 23 is rejected under 35 U.S.C. 102(e) as being unpatentable over Rasanen (US Patent Number 6445924) in view of Ray et al (US Patent Number 6424638) and still further in view of Valentine et al. (US Patent Number 6449478).

Regarding claim 23, the combination does not mention wherein wireless communication gateway server, the switching apparatus and the wireless telephone server is through a satellite network. However, Valentine et al shows wireless communication gateway server, the switching apparatus and the wireless telephone server is through a satellite network (see fig. 1 and 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Valentine to the combination so that satellite network can be used in mobile wireless network.

Allowable Subject Matter

12. Claims 4 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior arts do not mention wherein the first wireless communication gateway server provides to said second wireless communication gateway server the specification data which is read from the buffer memory emulator, and wherein said second wireless communication gateway server comprises a buffer memory emulator which stores the read specification data and wherein said second wireless communication gateway transfers the information from the information server to the portable terminal based on the read specification data, as specified in claim 4.

Art Unit: 2681

Regarding claim 10, the prior arts do not mention wherein the wireless communication gateway server refers to the specification data in the buffer memory emulator to access the portable terminal through the second access point, as specified in claim 10.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Nguyen whose telephone number is 7036054254. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

DN

David Nguyen


ERIKA GARY
PATENT EXAMINER